

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P965656

Luminaire Tested: **NAV-SB4A-740-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965656
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4A-740-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19756.8 lumens
Efficiency: N/A
Efficacy: 173.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 114
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

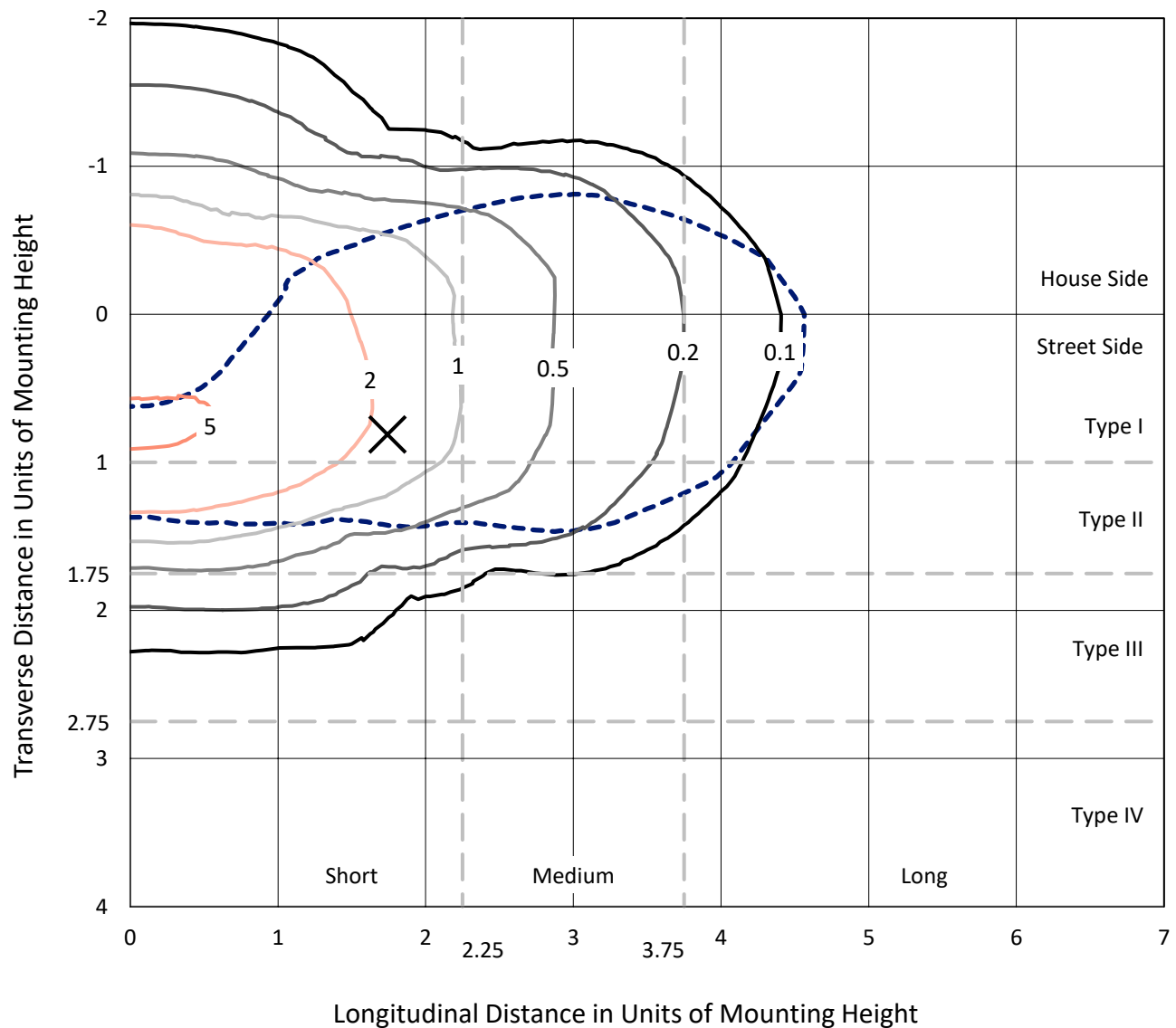


REPORT NUMBER: P965656

CATALOG NUMBER: NAV-SB4A-740-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

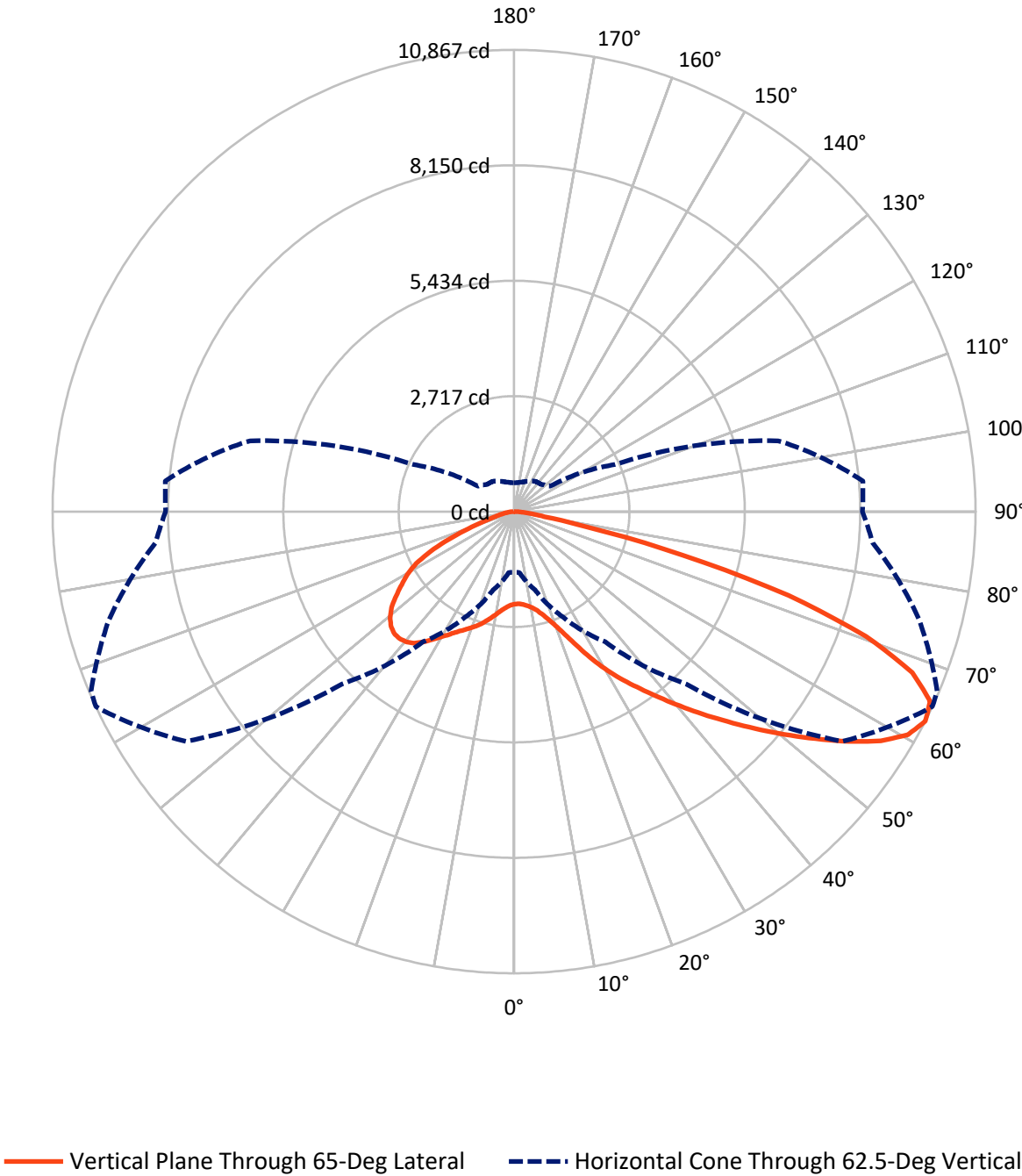
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
Type II - Short - N/A

REPORT NUMBER: P965656
CATALOG NUMBER: NAV-SB4A-740-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P965656

CATALOG NUMBER: NAV-SB4A-740-U-T2U

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6234.4	0.0	6234.4
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	13522.5	0.0	13522.5
	% Fixture	68.4	0.0	68.4
Total	Lumens	19756.8	0.0	19756.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.1	1.1
10°-20°	736.0	3.7
20°-30°	1492.4	7.6
30°-40°	2582.6	13.1
40°-50°	3908.3	19.8
50°-60°	4582.3	23.2
60°-70°	3841.7	19.4
70°-80°	2120.9	10.7
80°-90°	275.5	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	19756.8	100.0
0°-180°	19756.8	100.0

Coefficient of Utilization



REPORT NUMBER: P965656

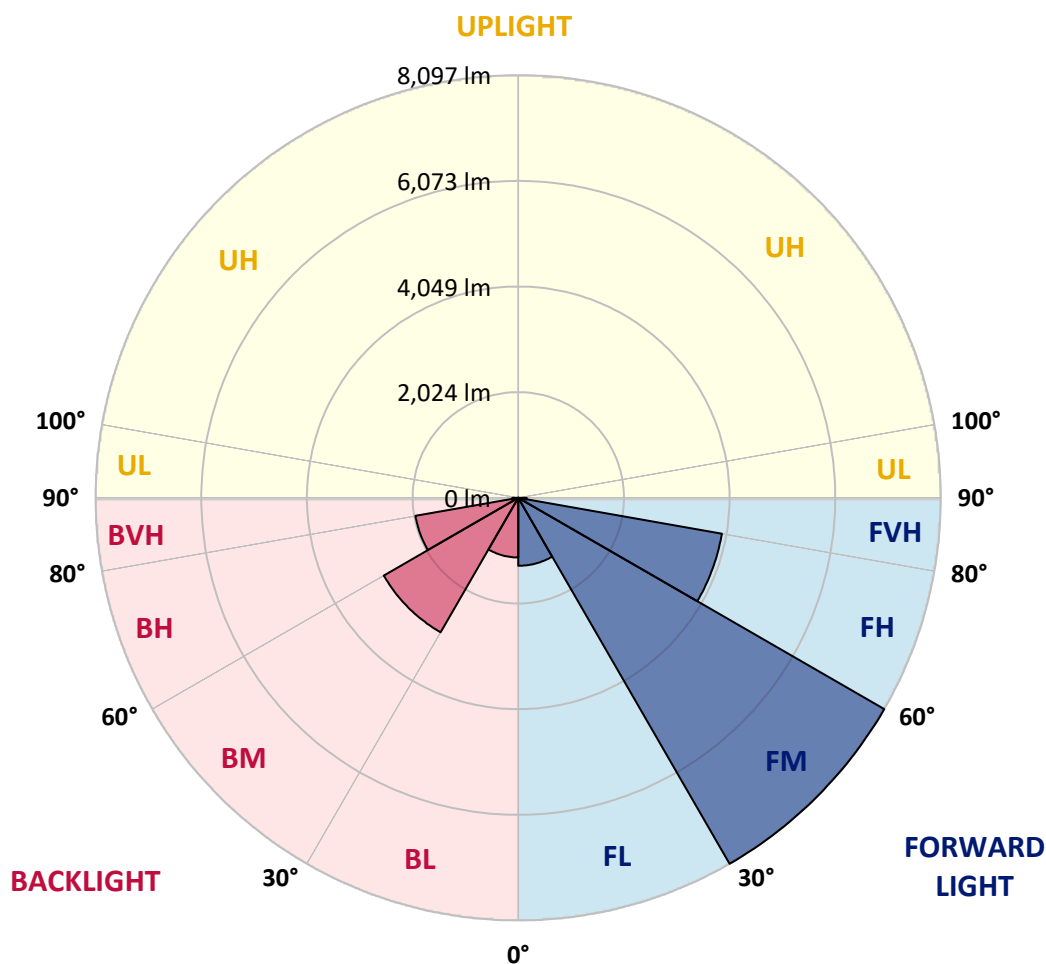
CATALOG NUMBER: NAV-SB4A-740-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1302.2	6.6			
FM	(30°-60°)	8097.0	41.0			
FH	(60°-80°)	3962.6	20.1			G2/5000
FVH	(80°-90°)	160.6	0.8			G2/225
BL	(0°-30°)	1143.3	5.8	B3/2500		
BM	(30°-60°)	2976.2	15.1	B3/5000		
BH	(60°-80°)	1999.9	10.1	B3/2500		G3/2500
BVH	(80°-90°)	114.9	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short



REPORT NUMBER: P965656

CATALOG NUMBER: NAV-SB4A-740-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2177.1	2177.1	2177.1	2177.1	2177.1	2177.1	2177.1	2177.1	2177.1	2177.1	2177.1
2.5°	2162.8	2156.6	2161.7	2161.7	2163.8	2162.8	2169.9	2172.0	2175.0	2181.2	2181.2
5°	2141.2	2140.2	2149.4	2157.6	2165.8	2173.0	2182.2	2195.5	2197.6	2204.8	2214.0
7.5°	2134.0	2127.9	2142.2	2152.5	2172.0	2189.4	2214.0	2236.5	2245.8	2248.8	2266.3
10°	2189.4	2179.1	2192.5	2198.6	2215.0	2232.4	2261.1	2297.0	2307.3	2319.6	2339.0
12.5°	2283.7	2272.4	2291.9	2301.1	2316.5	2331.9	2351.4	2386.2	2391.3	2413.9	2432.3
15°	2412.8	2399.5	2411.8	2423.1	2448.7	2463.1	2482.5	2516.4	2516.4	2533.8	2547.1
17.5°	2588.1	2570.7	2579.9	2584.0	2600.4	2622.0	2654.7	2684.5	2699.8	2693.7	2675.2
20°	2849.5	2828.0	2828.0	2807.5	2801.3	2818.7	2861.8	2902.8	2919.2	2887.4	2842.3
22.5°	3242.1	3211.3	3193.9	3124.2	3096.5	3098.6	3141.6	3191.8	3205.2	3148.8	3047.3
25°	3741.2	3693.1	3669.5	3567.0	3504.5	3450.2	3484.0	3548.6	3567.0	3497.3	3333.3
27.5°	4240.4	4243.5	4221.0	4098.0	3994.4	3895.0	3877.6	3945.2	3964.7	3885.8	3682.8
30°	4940.5	4867.7	4824.7	4677.1	4529.5	4390.1	4318.3	4346.0	4351.1	4256.8	4021.1
32.5°	5544.3	5525.9	5433.6	5304.5	5114.9	4896.4	4776.5	4732.4	4724.2	4590.0	4310.1
35°	6232.1	6221.9	6124.5	5970.7	5765.7	5462.3	5246.1	5120.0	5109.7	4921.0	4596.1
37.5°	6931.2	6931.2	6835.8	6667.7	6455.6	6076.3	5747.3	5547.4	5514.6	5268.6	4887.2
40°	7488.8	7454.9	7472.4	7401.6	7158.7	6755.9	6303.9	6013.8	5969.7	5674.5	5196.9
42.5°	7805.5	7794.2	7898.8	7977.7	7878.3	7556.4	6916.8	6519.1	6457.6	6121.4	5553.6
45°	7876.2	7863.9	8050.5	8339.5	8478.9	8346.7	7583.1	7051.1	6976.3	6588.8	5935.9
47.5°	7713.2	7688.6	7962.3	8418.4	8865.3	9098.0	8304.7	7628.2	7519.5	7043.9	6328.5
50°	7223.3	7199.7	7613.8	8219.6	8995.5	9608.5	9087.8	8240.1	8074.0	7531.8	6725.1
52.5°	6158.3	6169.6	6818.4	7650.7	8824.3	9926.2	9762.2	8884.8	8684.9	8031.0	7097.2
55°	4797.0	4821.6	5619.2	6535.5	8139.6	9878.0	10222.4	9549.0	9350.2	8500.4	7481.6
57.5°	3434.8	3543.4	4290.6	5197.9	6824.6	9114.4	10322.9	10180.4	9987.7	9012.9	7857.8
60°	2226.3	2245.8	3014.5	3928.8	5196.9	7757.3	10118.9	10659.1	10508.4	9535.7	8172.4
62.5°	1426.8	1440.1	1908.5	2748.0	3740.2	5739.1	9432.2	10867.2	10821.0	9881.1	8474.8
65°	1048.6	1038.3	1282.3	1816.3	2519.4	3539.3	8098.6	10766.7	10857.9	10097.4	8724.9
67.5°	875.4	861.0	980.9	1257.7	1856.3	2010.0	5992.3	10113.8	10447.9	10072.8	8908.4
70°	797.4	785.2	857.9	933.8	1448.3	1345.8	3020.7	8792.6	9307.1	9793.0	8878.7
72.5°	675.5	653.9	753.4	829.2	1126.5	1032.2	1248.4	6753.8	7381.1	8896.1	8460.5
75°	523.8	509.4	594.5	729.8	846.6	805.6	789.2	4101.0	4785.7	6879.9	7401.6
77.5°	415.1	395.6	473.6	568.9	761.6	607.8	575.0	1766.1	2444.6	4392.1	5538.2
80°	312.6	295.2	359.8	450.0	585.3	458.2	372.1	720.6	921.5	2225.3	2784.9
82.5°	222.4	207.0	251.1	330.0	393.6	411.0	228.6	403.8	454.1	857.9	622.2
85°	142.5	133.2	168.1	207.0	250.1	264.4	139.4	211.2	231.6	353.6	259.3
87.5°	77.9	63.6	90.2	96.4	115.8	105.6	66.6	76.9	83.0	128.1	109.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P965656

CATALOG NUMBER: NAV-SB4A-740-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2177.1	2177.1	2177.1	2177.1	2177.1	2177.1	2177.1	2177.1	2177.1	2177.1	2177.1
2.5°	2185.3	2188.4	2198.6	2201.7	2208.9	2218.1	2224.2	2230.4	2230.4	2236.5	2236.5
5°	2215.0	2222.2	2243.7	2255.0	2273.4	2291.9	2303.2	2316.5	2324.7	2328.8	2330.8
7.5°	2272.4	2283.7	2314.4	2333.9	2365.7	2391.3	2408.8	2427.2	2431.3	2442.6	2438.5
10°	2350.3	2363.6	2398.5	2435.4	2473.3	2505.1	2521.5	2534.8	2540.0	2542.0	2536.9
12.5°	2439.5	2459.0	2504.1	2549.2	2589.1	2616.8	2620.9	2617.8	2603.5	2591.2	2591.2
15°	2549.2	2566.6	2616.8	2666.0	2705.0	2710.1	2684.5	2668.1	2650.6	2647.6	2647.6
17.5°	2680.4	2689.6	2735.7	2783.9	2787.0	2769.5	2731.6	2716.2	2699.8	2688.6	2689.6
20°	2833.1	2830.0	2862.8	2883.3	2861.8	2808.5	2751.1	2725.5	2709.1	2695.7	2696.8
22.5°	3015.5	2992.0	2987.9	2982.7	2925.4	2813.6	2735.7	2702.9	2677.3	2658.8	2665.0
25°	3281.0	3190.8	3128.3	3093.4	2964.3	2786.0	2686.5	2613.8	2565.6	2533.8	2546.1
27.5°	3613.1	3461.4	3303.6	3218.5	2964.3	2729.6	2567.6	2449.8	2370.8	2338.0	2354.4
30°	3929.8	3771.0	3538.3	3369.2	2957.1	2637.3	2376.0	2212.0	2119.7	2086.9	2106.4
32.5°	4200.4	4027.2	3787.4	3534.2	2939.7	2487.7	2138.1	1956.7	1867.5	1828.6	1848.1
35°	4451.6	4267.1	4037.5	3715.6	2893.6	2268.3	1876.8	1738.4	1639.0	1576.4	1596.9
37.5°	4708.8	4489.5	4274.2	3879.6	2810.5	2012.1	1675.9	1558.0	1441.1	1357.1	1379.6
40°	4988.7	4726.3	4527.4	3977.0	2674.2	1768.1	1520.1	1412.4	1288.4	1199.2	1216.7
42.5°	5315.8	5010.2	4809.3	4027.2	2487.7	1594.9	1418.6	1313.0	1196.2	1123.4	1137.8
45°	5657.1	5322.9	5066.6	4026.2	2279.6	1513.9	1385.8	1281.2	1152.1	1076.2	1088.6
47.5°	6014.8	5649.9	5289.1	3960.6	2099.2	1525.2	1367.4	1212.6	1070.1	996.3	1006.6
50°	6373.6	6007.6	5504.4	3837.6	2022.3	1500.6	1298.7	1116.2	948.1	881.5	885.6
52.5°	6729.2	6387.9	5689.9	3662.3	1944.4	1409.4	1210.5	991.2	897.9	851.8	851.8
55°	7087.0	6764.1	5891.8	3407.1	1749.7	1302.8	1062.9	944.0	857.9	815.9	811.8
57.5°	7445.7	7198.7	6083.5	3151.9	1504.7	1171.6	982.0	886.6	817.9	782.1	775.9
60°	7818.8	7695.8	6281.3	2917.1	1262.8	1003.5	922.5	840.5	770.8	730.8	727.7
62.5°	8203.2	8243.2	6436.1	2614.8	1040.4	901.0	869.2	785.2	717.5	679.6	678.6
65°	8590.6	8771.0	6537.6	2195.5	843.6	803.6	811.8	724.7	656.0	623.2	622.2
67.5°	8882.8	9151.3	6508.9	1661.5	691.9	711.3	740.0	661.1	596.6	570.9	571.9
70°	8915.6	9106.2	6226.0	1137.8	579.1	621.2	660.1	598.6	532.0	513.5	514.6
72.5°	8478.9	8491.2	5437.7	743.1	489.9	545.3	576.0	535.0	470.5	452.0	451.0
75°	7334.0	7022.4	3992.4	489.9	410.0	468.4	497.1	468.4	405.9	410.0	395.6
77.5°	5556.6	4973.3	2424.1	348.5	342.3	393.6	432.6	412.0	358.7	402.8	354.6
80°	2862.8	2690.6	1081.4	260.3	270.6	314.7	355.7	329.0	283.9	270.6	247.0
82.5°	656.0	762.6	426.4	186.5	195.8	226.5	271.6	247.0	204.0	172.2	170.1
85°	229.6	251.1	188.6	116.8	114.8	141.4	184.5	165.0	138.4	110.7	116.8
87.5°	72.8	95.3	70.7	47.2	49.2	63.6	85.1	77.9	64.6	42.0	44.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)